In addition to the target display, an alphanumeric readout shall be provided which can present range, bearing, course, speed, CPA and TCPA for any selected target, either on the target display or by other display means.

The collision avoidance system shall be energized from the interior communications panel board in the wheelhouse.

The collision avoidance function may be incorporated in an integrated conning system, provided that failure of any other integrated system component will not degrade the collision avoidance function.

[CGD 79-148, 45 FR 54039, Aug. 14, 1980; 45 FR 71800, Oct. 30, 1980, as amended by CGD 83-004, 49 FR 43467, Oct. 29, 1984; USCG-1998-3799, 63 FR 35532, June 30, 1998]

### § 164.39 Steering gear: Foreign tankers.

- (a) This section applies to each foreign tanker of 10,000 gross tons or more, except a public vessel, that—
- (1) Transfers oil at a port or place subject to the jurisdiction of the United States; or
- (2) Otherwise enters or operates in the navigable waters of the United States, except a vessel described by §164.02 of this part.
- (b) *Definitions*. The terms used in this section are as follows:
- Constructed means the same as in Chapter II-1, Regulations 1.1.2 and 1.1.3.1, of SOLAS 74.

Existing tanker means a tanker-

- (1) For which the building contract is placed on or after June 1, 1979;
- (2) In the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after January 1, 1980;
- (3) The delivery of which occurs on or after June 1, 1982; or
- (4) That has undergone a major conversion contracted for on or after June 1, 1979; or construction of which was begun on or after January 1, 1980, or completed on or after June 1, 1982.

Public vessel, oil, hazardous materials, and foreign vessel mean the same as in 46 U.S.C. 2101.

SOLAS 74 means the International Convention for the Safety of Life at Sea, 1974, as amended.

Tanker means a self-propelled vessel defined as a tanker by 46 U.S.C. 2101(38) or as a tank vessel by 46 U.S.C. 2101(39).

(c) Each tanker constructed on or after September 1, 1984, must meet the

applicable requirements of Chapter II-1, Regulations 29 and 30, of SOLAS 74.

- (d) Each tanker constructed before September 1, 1984, must meet the requirements of Chapter II-1, Regulation 29.19, of SOLAS 74.
- (e) Each tanker of 40,000 gross tons or more, constructed before September 1, 1984, that does not meet the single-failure criterion of Chapter II-1, Regulation 29.16, of SOLAS 74, must meet the requirements of Chapter II-1, Regulation 29.20, of SOLAS 74.
- (f) Each tanker constructed before September 1, 1984, must meet the applicable requirements of Chapter II-1, Regulations 29.14 and 29.15, of SOLAS 74

[CGD 83-043, 60 FR 24771, May 10, 1995]

### §164.40 Devices to indicate speed and distance.

- (a) Each vessel required to be fitted with an Automatic Radar Plotting Aid (ARPA) under §164.38 of this part must be fitted with a device to indicate speed and distance of the vessel either through the water or over the ground.
- (b) The device must meet the following specifications:
- (1) The display must be easily readable on the bridge by day or night.
- (2) Errors in the indicated speed, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the speed of the vessel, or 0.5 knot, whichever is greater
- (3) Errors in the indicated distance run, when the vessel is operating free from shallow water effect, and from the effects of wind, current, and tide, should not exceed 5 percent of the distance run of the vessel in one hour or 0.5 nautical mile in each hour, whichever is greater.

[CGD 83-004, 49 FR 43467, Oct. 29, 1984, as amended by USCG-1998-3799, 63 FR 35532, June 30, 1998]

## §164.41 Electronic position fixing devices.

(a) Each vessel calling at a port in the continental United States, including Alaska south of Cape Prince of Wales, except each vessel owned or bareboat chartered and operated by the

#### § 164.42

United States, or by a state or its political subdivision, or by a foreign nation, and not engaged in commerce, must have one of the following:

- (1) A Type I or II LORAN C receiver as defined in Section 1.2(e), meeting Part 2 (Minimum Performance Standards) of the Radio Technical Commission for Marine Services (RTCM) Paper 12–78/DO–100 dated December 20, 1977, entitled "Minimum Performance Standards (MPS) Marine Loran–C Receiving Equipment". Each receiver installed must be labeled with the information required under paragraph (b) of this section.
- (2) A satellite navigation receiver with:
- (i) Automatic acquisition of satellite signals after initial operator settings have been entered; and
- (ii) Position updates derived from satellite information during each usable satellite pass.
- (3) A system that is found by the Commandant to meet the intent of the statements of availability, coverage, and accuracy for the U.S. Coastal Confluence Zone (CCZ) contained in the U.S. "Federal Radionavigation Plan" (Report No. DOD-NO 4650.4-P, I or No. DOT-TSC-RSPA-80-16, I). A person desiring a finding by the Commandant under this subparagraph must submit a written application describing the device to the Assistant Commandant for Operations, 2100 Second Street SW., Washington, DC 20593-0001. After reviewing the application, the Commandant may request additional information to establish whether or not the device meets the intent of the Federal Radionavigation Plan.

NOTE: The Federal Radionavigation Plan is available from the National Technical Information Service, Springfield, Va. 22161, with the following Government Accession Numbers:

Vol 1, ADA 116468

Vol 2, ADA 116469

Vol 3, ADA 116470

Vol 4, ADA 116471

- (b) Each label required under paragraph (a)(1) of this section must show the following:
- (1) The name and address of the manufacturer.
- (2) The following statement by the manufacturer:

This receiver was designed and manufactured to meet Part 2 (Minimum Performance Standards) of the RTCM MPS for Marine Loran-C Receiving Equipment.

(Sec. 12, 92 Stat. 1477 (33 U.S.C. 1231); 49 CFR 1.46(n)(4))

[CGD 81-081, 47 FR 58244, Dec. 30, 1982, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 96-026, 61 FR 33669, June 28, 1996; CGD 97-023, 62 FR 33365, June 19, 1997; USCG-1998-3799, 63 FR 35532, June 30, 1998]

### §164.42 Rate of turn indicator.

Each vessel of 100,000 gross tons or more constructed on or after September 1, 1984 shall be fitted with a rate of turn indicator.

[CGD 83-004, 49 FR 43468, Oct. 29, 1984]

# §164.43 Automatic Identification System Shipborne Equipment.

- (a) Each vessel required to provide automated position reports to a Vessel Traffic Service (VTS) must do so by an installed Automatic Identification System Shipborne Equipment (AISSE) system consisting of a:
- (1) Twelve-channel all-in-view Differential Global Positioning System (dGPS) receiver;
- (2) Marine band Non-Directional Beacon receiver capable of receiving dGPS error correction messages;
- (3) VHF—FM transceiver capable of Digital Selective Calling (DSC) on the designated DSC frequency; and

(4) Control unit.

- (b) An AISSE must have the following capabilities:
- (1) Use dGPS to sense the position of the vessel and determine the time of the position using Universal Coordinated Time (UTC);
- (2) Fully use the broadcast type 1, 2, 3, 5, 6, 7, 9, and 16 messages, as specified in RTCM Recommended Standards for Differential NAVSTAR GPS Service in determining the required information;
- (3) Achieve a position error which is less than ten meters (32.8 feet) 2 distance root mean square (2 drms) from the true North American Datum of 1983 (NAD 83) in the position information transmitted to a VTS;
- (4) Achieve a course error of less than 0.5 degrees from true course over ground in the course information transmitted to a VTS;